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Battery Discharge Protection

№100863



The device is based on contemporary microcontroller and is applicable for multi cell battery deep discharge prevent.

It is commonly used as safety component for kids' electric vehicles, electric scooters, radio controlled cars and other multi cell battery operated devices.

Battery Discharge Protection basic specifications

- Multi cell battery voltage rating: 9V÷100V
- Maximum commutation current:
 - 20A (without heatsink)
 - 30A (with heatsink)
- Multi cell battery level LED indication
- Easy programming level of building protection
- Supply Voltage: 9V÷18V DC
- Size: 55mm x 36mm
- Suitable for mounting in **Box universal A79**
- The device has memorized factory default settings ready for use with standard multi cell battery at 12V, respectively 10,7V at low level and 13,5V at high level

Attention!!!

In case of using the device at current **above 20A**, a suitable heatsink must be slipped on power elements (transistor Q2 and Q4) which are placed on the PCB's component side

Description

- Electronic protection against multi cell battery deep discharge
- Button **S1 (SET)** – for programming
- terminal **J1 (DC Power)** – Supply voltage 9V÷18V DC
- terminal **J2 (IN)** – multi cell battery input voltage
- terminal **J3 (OUT)** – Output voltage to load

Signalling:

- LED **D2 (short flash red)** – turned off output, voltage below the lower limit
- LED **D2 (flash red)** – level below 25%
- LED **D2 (red)** – level from 25% to 50%
- LED **D2 (flash green)** – level from 50% to 75%
- LED **D2 (green)** – level above 75%

Note:

- Level 0% - set voltage lower level
- Level 100% - set voltage top level

Programming:

1. Press and hold **S1 (SET)** button for 3 seconds
2. **D4** LED flashes in red-green 3 times one after other repeatedly
3. When **D2** LED (flashes in red)
 - Voltage **lower** level must be set
4. **S1 (SET)** button must be pressed and held for 3 seconds
5. When **D2** LED (flashes in green)
 - Voltage **top** level must be set
6. **S1 (SET)** button must be pressed and held for 3 seconds
7. **D2** LED (green light is on) for 3 seconds and goes out
8. The next time the device is turned on it enters a working mode

Example of Device Wiring Diagram

